



1

SEQUENCE LISTING

<110> ELLIS, JOHN TIMOTHY
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<140> 10/608,436

<141> 2003-06-30

<150> AU PP 9928

<151> 1999-04-21

<150> PCT/AU00/00354

<151> 2000-04-20

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<170> PatentIn version 3.2

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<212> PRT

<213> Neospora caninum

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 Glu Lys Asp Asp Gln Asn Leu Pro Asn Pro Phe His Val Ser Leu Pro
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 Gly Tyr Ser Pro Ser Leu Cys Lys Tyr Val Leu Thr Lys Gly Glu Lys
 145 150 155 160
 Pro Pro Arg Asp Pro Leu Leu Gly Pro Glu Ile Thr Ile Tyr Pro Pro
 165 170 175
 Thr Trp Ile Pro His Trp Glu Pro Asp Pro Asn Phe Lys Pro Gln Ala
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 Tyr Asn Phe Asn Trp Glu Glu Asn Gly Thr Phe Gln Met Glu Arg Leu
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 Glu Thr Val Gln Ala Leu Val Glu Gln His Arg Phe Ser Asn Asp Tyr
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 Asp Gln Glu Ala Glu Tyr Arg Arg Arg Arg Gln Glu Leu Gly Ser Gln
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 Thr Pro Glu Glu Ile Glu Glu Ala Lys Arg Lys Tyr Arg Lys Gln Val
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 Leu Lys Glu Gln Gln Glu Asp Glu Glu Leu Lys Lys Lys Thr Asp Ala
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Val Ile Glu Glu Leu Lys Lys Thr Ala Glu Glu Arg Gly Leu Arg Arg
 115 120 125

Tyr Pro Glu Arg Asp Glu Asp Arg Thr Asp Asp Gln Gln Met Asp Phe
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Glu Thr Arg Gln Arg Glu Leu Arg Asn Met Asp Ser Ala Thr Lys Ala
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Gln Leu Leu Lys Gln Arg Arg Lys Glu Asn Glu Glu Arg Asn Arg Val
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 35 40 45

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Gln Pro Glu Thr Pro Thr Ala Glu Ala Val Lys Gln Ala Ala Ala Lys
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Glu Asn Ala Tyr Tyr His Val Lys Lys Ala Thr Met Lys Gly Phe Asp
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Val Ala Lys Asp Gln Ser Tyr Lys Gly Tyr Leu Ala Val Arg Lys Ala
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Thr Ala Lys Gly Leu Gln Ser Ala Gly Lys Ser Leu Glu Leu Lys Glu
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 145 150 155 160

Pro Ser Gly Pro Arg Ser Gly Glu Val Gln Arg Thr Arg Lys Glu Gln
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<213> Neospora caninum

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 35 40 45

Asp Gln Asn Leu Pro Asn Pro Phe His Val Ser Leu Pro Gly Tyr Ser
 50 55 60

Pro Ser Leu Cys Lys Tyr Val Leu Thr Lys Gly Glu Lys Pro Pro Arg
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Asp Pro Leu Leu Gly Pro Glu Ile Thr Ile Tyr Pro Pro Thr Trp Ile
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Pro His Trp Glu Pro Asp Pro Asn Phe Lys Pro Gln Ala Tyr Asn Phe
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Asn Trp Glu Glu Asn Gly Thr Phe Gln Met Glu Arg Leu Pro Tyr Ala
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 Thr Val Gln Ala Leu Val Glu Gln His Arg Phe Ser Asn Asp Tyr Asp
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 Gln Glu Ala Glu Tyr Arg Arg Arg Arg Gln Glu Leu Gly Ser Gln Thr
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 Lys Glu Gln Gln Glu Asp Glu Glu Leu Lys Lys Lys Thr Asp Ala Val
 100 105 110

Ile Glu Glu Leu Lys Lys Thr Ala Glu Glu Arg Gly Leu Arg Arg Tyr
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<212> DNA

<213> *Neospora caninum*

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<212> PRT

<213> *Toxoplasma gondii*

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Gly Pro Val Asp Val Pro Phe Ser Gly Lys Pro Leu Asp Glu Arg Ala
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Val Gly Gly Lys Gly Glu His Thr Pro Pro Leu Pro Asp Glu Arg Gln
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Gln Glu Pro Glu Glu Pro Val Ser Gln Arg Ala Ser Arg Val Ala Glu
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Gln Leu Phe Arg Lys Phe Leu Lys Phe Ala Glu Asn Val Gly His His
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Ser Glu Lys Ala Phe Lys Lys Ala Lys Val Val Ala Glu Lys Gly Phe
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Thr Ala Ala Lys Thr His Thr Val Arg Gly Phe Lys Val Ala Lys Glu
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Ala Ala Gly Arg Gly Met Val Thr Val Gly Lys Lys Leu Ala Asn Val
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Glu Ser Asp Arg Ser Thr Thr Thr Thr Gln Ala Pro Asp Ser Pro Asn
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Gly Leu Ala Glu Thr Glu Val Pro Val Glu Pro Gln Gln Arg Ala Ala
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His Val Pro Val Pro Asp Phe Ser Gln
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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

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<210> 15
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<220>
 <223> Description of Artificial Sequence: PCR primer

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<220>
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 <223> Description of Artificial Sequence: PCR primer

<400> 17
 gccgctctag aacta 15

<210> 18
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 18
cgagcaccca caagtaa 17

<210> 19
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 19
gaccataacg gatgcaac 18

<210> 20
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 20
cagcggttat tccggata 18

<210> 21
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 21
gcctcaagaa tttcctcagc 20

<210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 22
 ggtaggttac cacaacttgc 20

<210> 23
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 23
 gcaattgcat tgagcatc 18

<210> 24
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 24
 acggatggat ccgttcacgg ggaaacgttg g 31

<210> 25
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 25
 acgtcagaat tctaacgcca tacacaccgt 30

<210> 26
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 26
gaggtatata ttaatgtatc g 21

<210> 27
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 27
cgtacgtcta gagccaccat gtacacgggg aaacgttgg 39

<210> 28
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 28
acgtcaggat ccgcacgcac acaaagccca 30

<210> 29
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 29
gctgacagac taacagactg 20

<210> 30
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 30
 aactagaagg cacagcag 18

<210> 31
 <211> 39
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 31
 cgtacgtcta gagccaccat ggtcggcgcc gcagtcgta 39

<210> 32
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer

<400> 32
 acgtcaggat ccttcacggg gaaacgttgg 30

<210> 33
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Signal peptide

<400> 33
 Trp Ile Leu Val Val Ala Val Gly Ala Leu Val Gly Ala
 1 5 10

<210> 34
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 34
accgtggcag tccgctgt 18

<210> 35
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 35
tgggctgatg accccgtc 18

<210> 36
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 36
ccaaggcagg agaggcac 18

<210> 37
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 37
accactgctc aactac 16

<210> 38
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 38
gcgcgtctag atagca 16

<210> 39
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 39
gcgcgtctag atagca 16

<210> 40
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 40
agcctatctc tgcgta 16

<210> 41
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 41
agctgaccac ctcaccgat 19

<210> 42
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 42
tgaagtccca agcgtcctc

19

<210> 43
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 43
actctccgtc tctctctgc

19

<210> 44
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 44
ccacgccctg aactgact

18

<210> 45
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 45
gccttggtga ggatgga

17

<210> 46
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 46
tgctggatcg aagac 15

<210> 47
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 47
aggcgggtaa atggtaa 17

<210> 48
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 48
acgcatggat ccggatccta aagtggagag t 31

<210> 49
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 49
acgtatgaat tcccaagagg aaaacaatgt 30

<210> 50
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 50
gaggtatata ttaatgtatc g 21

<210> 51
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 51
acgcatgaat tctatggatc ctaaagtgga gagt 34

<210> 52
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 52
catgacctcg aggacgcgcg gaacaccgta 30

<210> 53
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 53
ttaatacgac tcactatagg g 21

<210> 54
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 54
gctagttatt gctcagcg 18

<210> 55
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 55
acgtatggat ccgttttgtc aggtgttctt g 31

<210> 56
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 56
acgtatggat ccgaacaagc ccgggccggtt t 31

<210> 57
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<400> 57
acgtataagc tttgccttct tgcgggccgc ga 32

<210> 58
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 58
atatactact ccctgtgagt t

21

<210> 59
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 59
gtaatctgaa agcgaataga g

21

<210> 60
<211> 4
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide motif

<400> 60
Ala Tyr Pro Tyr
1